



# QFPC-P INSTRUCTION MANUAL

# For the quick release Side mounting system - 16/07/18

**Note:** If you have a fibreglass van or aluminium composite wall or aluminium cladding where you need to secure to the wall outer skin: use the supplied 5 mm dia special rivets for this purpose. See example rivet pictured.

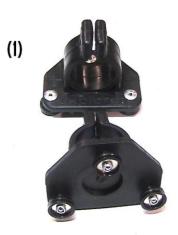


You will also need some black silicon or suitable outdoor sealant.

# Unpack the components and check the contents against the list below:

# **Main components:**

1. 2 by Side Mounts each with 3 "Feet attached".



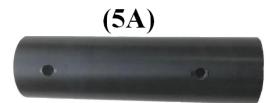
- 2. 2 by Quick Release Brackets.
- 3. 1 by 25 mm mast cap.



4. 1 by 1.0-meter x 25mm dia aluminium tube.



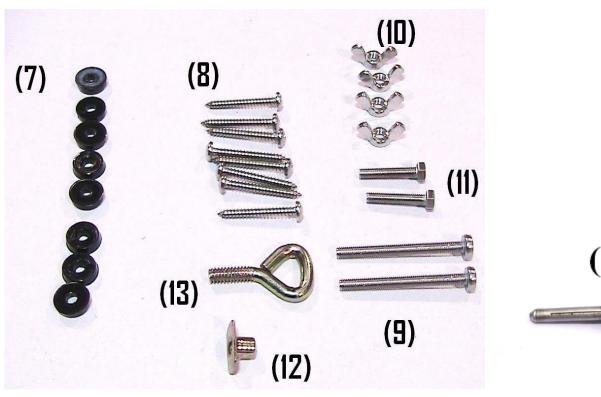




- 5A. Mast Joiner, plastic.
- 5. 1 by 1.5-meter x 25mm dia aluminium tube.
- 6. 1 by 32mm dia x 0.75-Meter-long mast Support section with 32mm mast cap installed.

### **Bolt Pack:**

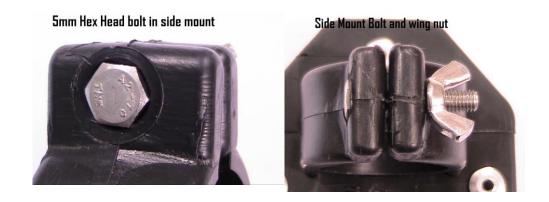
- 7. 8 by small black spacers required if the mast as to sit further out from the wall to miss the roof on a pop top or Campervan.
- 8. 8 by stainless steel #8 x 1.1/4-inch stainless steel screws.
- 9. 2 by 5mm x 40mm stainless steel screw.
- 10. 4 by 5mm stainless steel wing nuts.
- 11. 2 by 5 mm x 25mm hex head screws.
- 12. 1 by T- nut.
- 13. 1 by Thumb screw.
- 14. 8 by Special POP rivets



### **Assembly of the mast System Instructions**

First assemble the mast system so you have a good idea of how it all fits together.

1. Take one of the **side mounts** (1) and fit the 5 mm x 25mm **hex head screw** (11) and wing nut (10) – refer to pictures. Take care to line up the hex head of the screw with the hex shape in the plastic to allow it to seat properly. Repeat on the second side mount.



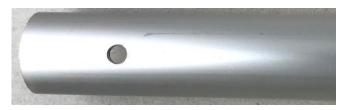
- 2. Slide one of the **Side Mounts** over the **32mm Support Section** from the bottom end, (end without the cap) making sure that the end with the single foot on the side mount is facing down. Slide it all the way to near the top and loosely tighten the wing nut to stop it sliding.
- 3. Install the second **Side Mount** to the bottom end of the **32mm Support Section** as above.
- 4. Install the T-Nut (12) and Thumb screw (13) into the Bottom end of the **32mm Support Section** refer to figure below.



5. Take the section of 25mm by 1.5 meter dia aluminium tube without the joiner attached and insert from the top into the **32mm Support Section.** Tighten the thumb screw to hold in place.

#### Assemble the Plastic Mast joiner to the 1.0 meter aluminium pole.

1. Take the 1.0 meter mast section and slide the Mast Joiner over one end. Turn to align the screw holes. If not perfectly aligned twist 180 degrees to get best whole alignment.



2. Insert the 5mm x 40 mm stainless steel screw and secure with the stainless steel wing nut.





# **Installation Instructions**

- **Step 1**. Firstly bring the van in a level position using a good quality Level on the A frame of the van.
- **Step 2.** Locate a suitable place to install the masting on your Van/ Camper trailer. Note that this should be an area that will not restrict the attachment of awnings pieces or other mountable accessories.

For help in choosing the right place, visit our 'Wilkgard' YouTube Channel or visit the link <a href="www.tinyurl.com/wilkgard">www.tinyurl.com/wilkgard</a> and look for the video "Understand van construction & choose where to locate the mast on your caravan"

- For **fibreglass or aluminium sandwich** (aluminium on wood on foam with an internal layer of wood) vans it can be positioned almost anywhere so long as it does not interfere with any awnings or other bolt on structures.
- For **Aluminium cladding** vans **best position** is on the front top corner where a gusset of wood is always present for structural strength and this is perfect for the top bracket to be screwed to. It is also an area where wiring is not likely to present any problem. The lower bracket should be above the bottom of the window **Note:** The wiring is run along the length of the van **below** the window height so mount above this line. Check the inside of the van for where the electrical wires may run and be sure to stay away from this area. (Refer to the pictures at the end of these instructions.)

For the lower bracket you will want to drill the two lower bracket holes through the double layer of aluminium where two of the cladding pieces overlap. (This is at about every 7 inches depending on the cladding design.)

- For **camper trailers** a utility box is often attached at the drawbar end and this is ideal to attach to provided no canvas blocks the area when the van is assembled. In this case where no wooden framing is present we recommend using the supplied special 5mm dia pop rivets, you will need to drill the brackets out to 5 mm for this

# Once the position of installation is chosen.

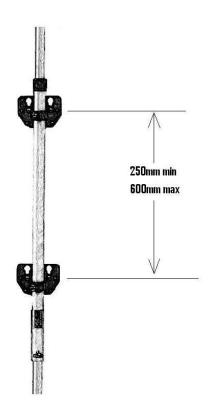
Attach the quick release brackets to the two side mount brackets. – Make sure they are fully seated so that they cannot slide down any further, **refer to the photographs below**. Loosen the wing nuts and press the mast onto a flat ground and tighten the wing nuts. Push the bracket up until all the way seated.

Line up the mast where you want to install it. Check that it is vertical and see where the lower bracket falls. Adjust the position of the lower bracket to put it close to where you want it.

Fibreglass vans sometimes have a layer of wood behind the fibreglass outer layer some are just fibreglass to foam. Either way you can use the supplied specials Pop rivets that split to provide a large surface area to grip over on the inside of the skin. Where there is wood use the screws.

The Quick Release Brackets can not be spaced further apart than the 600 mm and no closer together than 250mm. The greater the distance apart of course the greater the strength and stability so you should always try for the best distance apart that the location permits.





**Step 3.** - Once you are satisfied with the position you are going to mount the brackets, locate the top **Quick Release Bracket** *with the two holes on the upper position* and drill through into the wall using one of the mounting boss holes as a guide, with a 4mm drill. (If using the special pop rivets you will need to open the holes to 5 mm after the pilot 4 mm hole has been drilled. Then use a 5mm drill through the quick release bracket and the van. Refer to picture of rivets below).

**Note:** When Drilling, the Aim is to just penetrate the outer layer, so use light pressure on the drill until it just breaks through. If drilling into wood then use a 3 mm or 1/8 inch drill to drill a pilot hole for the screws into the wood. Again just deep enough to penetrate the wooden gusset. If drilling into a vertical wooden beam drill further to prevent the wood from splitting. The aim here is not penetrate into the wall further than necessary and therefore not run into any thing else. Its easy just take care.

Install one screw/rivet loosely. Put the level along the side straddling the two side mount brackets and adjust the top bracket to have the mast vertical. Drill the second lower hole. Install a second screw/rivet loosely. Drill the remaining two holes in the top bracket. You can remove the mast and install the remaining screws/rivets to temporarily hold the bracket in place.

Note you will be removing them again to add an adhesive/sealant to protect against water ingress.



**Step 4.** - Now when you attach the lower bracket you must check that it falls within the correct spacing criteria and you will want them to be in alignment in a vertical plane. You can use a level for this placed against the side of the side mounts:

Check to see that the lower quick release bracket is fitted to the lower side mount and as far as it goes in the up position. Install the mast onto the top bracket previously secured to the van . Correct for any difference in rotation so that it sits flat against the van wall and tighten wing nut to secure. With the van in a level position use a level against the mast and bring it into a vertical position.

Make sure for Aluminium cladding vans that the two lower Quick release bracket holes line up with the double layer of cladding where the two claddings overlap. Undo the wing nut and adjust position as required to achieve this. Using a 4 mm dia drill a hole. Drill to just penetrate the aluminium. If you hit air beyond the aluminium then you will be using a rivet so you can go ahead and drill that hole with a 5mm drill in both the bracket and the van.

Place the bracket back on and locate with a rivet. Repeat for the 3 remaining holes. If you hit wood with the 4 mm hole stop and use a 3 mm pilot hole in the wood and secure with a screw.

**Step 5.** - You can now remove the mast and the upper and lower brackets and add the adhesive/Sealant – such as black silicon and reinstall using a standard hand Pop rivet gun or screwdriver for the screws – do not over tighten the screws and strip the thread in the wood.

**Note:** I find it easiest to install the rivets or screws and put a bead of silicon around the boss against the screw or rivet. This will be a meat job and not require cleaning up as it uses the minimum amount of silicon.

Carefully clean up any excessive adhesive.

**Step 6.** - Now loosen the lower side mount wing nut and hook the mast onto the **Quick Release Brackets.** Move the lower bracket as required to bottom out both side mounts in the slots in the **Quick Release Brackets.** Then tighten the wing nuts on side mount – tighten well to prevent movement.

### Attaching your antenna

If not using an explorer C4/C4A antenna place the 25 mm mast cap over the top of the mast aluminium tube that you mostly use.

If you are using an explorer C4 or C4A antenna and there is no existing 5 mm hole, then place the **Vertical to Horizontal Mount** over the 25 mm tube and drill a 5 mm hole through one side of the mast only using the 5 mm hole in the Vertical **to Horizontal Mount** as a guide. **Use the bolt in this side to stop any rotation of the pole to mount. Turn it over and drill the other side. The bolt should be able to pass straight through.** Use this hole to secure your C4 antenna when in use.

#### Vertical/Horizontal mount



If you are not using an explorer C4/C4A antenna you can now attach your antenna to the 25mm dia aluminium tube and you can install the mast cap.

Place the upper mast and antenna assembly over the top of the existing mast and put the 5mm bolt through and secure with the wing nut.

If you do not need the extra height then just install your antenna to the existing 1.5 meter x 25mm dia aluminium tube (6) as above.

#### Congratulations your new mounting is complete.







Picture of Van with Cladding removed showing lateral electrical wiring and central vertical wiring to electrical section within the van. Pictures at the front and rear of the van show little to no wiring above the lower window height. Right hand picture shows the front top corner where the best mounting position is for this construction of van. This is to screw into the wooden gusset at the top and for the bottom bracket; you can try and collect one of the vertical wooden inner wall structure pieces. The remaining lower bracket can be secured with the special pop rivets supplied or you can use the rivets entirely for the lower bracket.